AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0007] of the specification as follows:

[0007] U.S. Patent No. 3,938,129 to Smither describes data transmission over a line carrying alternating current power. U.S. Patent No. 5,452,344 to Larson describes ~~an~~ a frequency shift key (FSK) carrier communication system for transmitting and receiving data on electric utility lines, particularly for communication with electric utility meters and vending machines. U.S. Patent No. 5,835,005 to Furukawa et al. describes power line communication systems employing relay stations, particularly for use with large refrigerated container carriers and communication with the refrigerated containers over electrical lines. U.S. Patent No. 6,373,377 to Sacca et al. describes a power supply with coupling for using the AC power line to communicate digital data from within a digital device, such as a computer. The prior uses of power line communication deal only with transmissions over utility and house level alternating current power lines, and do not address the particular difficulties inherent to power distribution networks of microelectronics chips or communications over direct current power lines.

Please amend paragraph [0043] of the specification as follows:

[0043] FIG. 8 shows another example of a receiver 800. Input signal 810 is provided to a coupling capacitor 812. Coupled signal 814 is provided to mixer 815. Intermediate frequency 820 is provided to mixer 815. Coupled signal 814 and intermediate frequency 820 are mixed and provided as mixed signal 825 to a first amplifier 830. Mixed signal 825 is amplified and amplified signal 835 is provided to demodulation mixer 840. Demodulation frequency 845 is used to demodulate amplified signal 835. Demodulation output 850 is provided to differential amplifier 855. The output 860 of differential amplifier 855 is provided to a second amplifier 865. The amplified output signal is then available for decoding and use. Depending on the required use of the information, the amplified output signal can be level shifted to produce a digital signal prior to decoding and use. In one aspect, any of the mixers and amplifiers in this

Law Offices of
Downs Rachlin Martin PLLC
199 Main Street, P.O. Box 190
Burlington, VT 05402-0190
(802) 863-2375

embodiment can be implemented using CMOS circuits, thus reducing the space on the chip required for the receiver circuitry. In another aspect, coupling capacitor 812 can be implemented using a polysilicon or diffusion layer. In yet another aspect, coupling capacitor 812 can be implemented using a CMOS transistor.

Please amend paragraph [0044] of the specification as follows:

[0044] FIG. 9 shows yet another example of a receiver 900. Input signal 910 is provided to decoupling capacitor 915. Signal 920 is provided to notch filter 925, which filters out all but the communication signal 930. Notch filter 925 can include CMOS transistors. Communication signal 930 is provided to amplifier 935. Amplified communication signal 940 is provided to level shifter 945. Level shifter 945 can be implemented as a operational amplifier. Output communication signal 950 can be used and/or decoded.

Please amend paragraph [0050] of the specification as follows:

[0050] In still yet a further embodiment, a communication system according to the present disclosure may include a power data switch segmenting a power distribution network into a plurality of power distribution network segments and being operatively configured to control routing of a communication signal amongst the plurality of power distribution network segments. FIG. 15 illustrates one example of a communication system 1500 having a first power distribution network 1505 including one or more power lines, here represented as power lines 1510, 1512, 1514, 1516, 1518, 1520, and 1522, branching from first connecting power line 1525. ~~second~~ Second power distribution network 1527 includes one or more power lines, here represented as power lines 1530, 1532, 1534, 1536, 1538, 1540, and 1542, branching from second connecting power line 1545.

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Downs Rachlin Martin PLLC
199 Main Street, P.O. Box 190
Burlington, VT 05402-0190
(802) 863-2375